

## Claims

- [c1] A driver circuit comprising:  
a plurality of parallel resistors, wherein a total impedance of all said resistors equals an impedance of an associated transmission line; and  
a switch adapted to combine said resistors to control an output level of said driver.
- [c2] The driver circuit in claim 1, wherein said switch selectively connects said resistors to either a voltage high signal or a voltage low signal.
- [c3] The driver circuit in claim 1, wherein a first set of said switches connect a voltage high signal to a first resistor of said resistors and a second set of switches connect a voltage low signal to a second resistor of said resistors.
- [c4] The driver circuit in claim 1, wherein said switch comprises a matched pair of opposite type transistors.
- [c5] The driver circuit in claim 1, further comprising balancing resistors connected to said switch, wherein said balancing resistors are sized to balance the resistance within said driver circuit.
- [c6] The driver circuit in claim 5, wherein said resistors are said balancing resistors.
- [c7] The driver circuit in claim 1, further comprising drivers connected to said switches.
- [c8] A driver circuit connected to a transmission line, said driver circuit comprising:  
a plurality of parallel resistors, wherein a total impedance of all said resistors equals an impedance of said transmission line; and  
a plurality of switches, each connected to one of said resistors, said switches being adapted to combine said resistors to control an output level of said driver.
- [c9] The driver circuit in claim 8, wherein each of said switches selectively connects one of said resistors to either a voltage high signal or a voltage low signal.
- [c10] The driver circuit in claim 8, wherein a first set of said switches connect a

voltage high signal to a first resistor of said resistors and a second set of said switches connect a voltage low signal to a second resistor of said resistors.

- [c11] The driver circuit in claim 8, wherein each of said switches comprises a matched pair of opposite type transistors.
- [c12] The driver circuit in claim 8, further comprising balancing resistors connected to said switches, wherein said balancing resistors are sized to balance the resistance within said driver circuit.
- [c13] The driver circuit in claim 12, wherein said resistors are said balancing resistors.
- [c14] The driver circuit in claim 8, further comprising drivers connected to said switches.
- [c15] A driver circuit connected to a transmission line, said driver circuit comprising:  
a plurality of parallel resistive segments, wherein a total impedance of all said resistive segments equals an impedance of said transmission line,  
wherein each of said resistive segments includes two resistors and switches connected to said resistive segments, and  
wherein said switches are adapted to combine said resistors to control an output level of said driver.
- [c16] The driver circuit in claim 15, wherein said switches selectively connect said resistors to either a voltage high signal or a voltage low signal.
- [c17] The driver circuit in claim 15, wherein a first set of said switches connect a voltage high signal to a first resistor of said resistors and a second set of switches connect a voltage low signal to a second resistor of said resistors.
- [c18] The driver circuit in claim 15, wherein each of said switches comprises a matched pair of opposite type transistors.
- [c19] The driver circuit in claim 15, further comprising balancing resistors connected to said switches, wherein said balancing resistors are sized to balance the resistance within said driver circuit.
- [c20] The driver circuit in claim 15, further comprising drivers connected to said

